PATENT Reply under 37 CFR 1.116 EXPEDITED PROCEDURE Group 1762

REMARKS

Claims 24-45 are pending and rejected in this application. Claims 24, 43 and 44 are amended hereby.

Responsive to the rejection of claim 43 under 35 U.S.C. § 112, first paragraph, Applicants have amended claims 43 and 44 to remove the reference to graphic papers. For the foregoing reasons, Applicants submit that claim 43 does now specifically claim elements described in the specification in such a way as to reasonably convey that the inventor was in possession of the claimed invention at the time the application was filed, and submit that claim 43 is now in condition for allowance, which is hereby respectfully requested.

Responsive to the rejection of claim 44 under 35 U.S.C. § 112, second paragraph, Applicants have amended claim 44 and submit that claim 44 is now in condition for allowance. Applicants have amended claim 44 to depend from claim 43 and have removed the reference to graphics paper and indicated that claim 44 depends from claim 43 wherein paper and cardboard are specifically claimed. Further, Applicants have amended claim 44 to indicate that the required weights are when they are applied to the paper or cardboard. For the foregoing reasons, Applicants submit that claim 44 is now in condition for allowance, which is hereby respectfully requested.

Responsive to the rejection of claims 24-34, 36-39 and 41-45 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No 4,230,743 (Nakamura et al.) in view of U.S. Patent No. 3,632,374 (Greiller), Applicants have amended claim 24 and submit that claims 24-34, 36-39 and 41-45 are now in condition for allowance.

Nakamura et al. disclose a process for producing pressure sensitive copying paper (Figs. 3 and 4) using a coating solution 1 containing microcapsules as a main component. A wind shielding plate 11 is placed upstream of the contact area so that the free fall of the material VOI0211.US

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reaches web 9 without being disturbed (column 4, lines 8-55). The coating apparatus shown in Fig. 4 has a first coating apparatus and a second coating apparatus positioned subsequent to the first coating apparatus in the direction of flow of web 9. Web 9 goes through a first curtain and a second curtain flow as it proceeds in the direction of the arrow shown on web 9 of Fig. 4. The second coating layer is formed on the first coating layer while the first coating layer is in an undried state (column 7, lines 1-50).

Greiller discloses a method of making photographic elements (Figs. 3, 5, 10 and 12).

Longitudinal edges of free falling curtain 27" eminate from hopper 21" and engage vertical edge guides 24", which extend beyond and below the opposite edges of support 29 to be coated (column 8, lines 1-5). An air shield 32' is straight instead of curved and provides a vacuum manifold 45, which is positioned adjacent the web to be coated and connected to a vacuum pump to withdraw air therefrom as indicated by the arrow in Fig. 9. Air entrained by web 29" is drawn off the surface just before it reaches the free falling curtain (column 10, lines 35-46).

In contrast, claim 24 as amended, recites in part:

forming a pressure differential in a space partially bounded by said first curtain and said second curtain, said pressure differential being relative to an ambient atmospheric pressure.

(Emphasis added). Applicants submit that such an invention is neither taught, disclosed nor suggested by Nakamura et al., Greiller or any of the other cited references, alone or in combination, and include distinct advantages thereover.

Nakamura et al. disclose a process for producing pressure sensitive copying paper including a coating solution that contains microcapsules of a main component. Greiller discloses a method of making photographic element including a vacuum manifold that is positioned adjacent to the web to be coated and connected to a vacuum pump. While Greiller discloses a pressure differential area it is not bounded by the curtain that is coming from a applicator. The VOI0211.US

curtain is made of the application medium that is flowing to the material web. The pressure differential space of Applicants' invention is partially bounded by the applicator, the material web and the curtains themselves as they travel toward the material web. Therefore, Nakamura et al., Greiller and any of the other cited references, alone or in combination, fail to disclose, teach or suggest the step of forming a pressure differential in a space partially bounded by a first curtain and a second curtain, the pressure differential being relative to an ambient atmospheric pressure, as recited in claim 24.

Applicants' invention has distinct advantages in that a vacuum or a positive pressure is provided in a space that is partially bounded by the first and second curtains. The pressure differential exists all the way to the curtains, which are part of the boundary thereof. Further advantages of the present invention is that the wetting of the top coat or pre-coat is improved. If the use of a positive pressure is carried out between the first and second curtains, this causes pre-coat to be anchored in a superior manner on the moving material web, and both curtains are stabilized, with the positive pressure reducing the tendency for the material of each curtain to flutter. For all the foregoing reasons, Applicants submit that claim 24, and claims 25-34, 36-39 and 41-45 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. in view of Greiller and in further view of U.S. Patent No. 5,192,592 (Shay). However, claim 35 depends from claim 24, which is now in condition for allowance for the reasons given above. Accordingly, Applicants submit that claim 35 is now in condition for allowance, which is hereby respectfully requested.

Claim 40 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over

Nakamura et al. in view of Greiller and further in view of U.S. Patent No. 5,136,970 (Saito et al.).

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However, claim 40 depends from claim 24, which is now in condition for allowance for the reasons given above. Accordingly, Applicants submit that claim 40 is now in condition for allowance, which is hereby respectfully requested.

For the foregoing reasons, Applicants submit that the pending claims are definite and do particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Moreover, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

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Should any question concerning any of the foregoing arise, the Examiner is invited to

telephone the undersigned at (260) 897-3400.

Respectfully submitted.

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CERTIFICATE OF MAILING

Thereby certify that this correspondence is being transmitted via facsimile to the U.S. Patent and Trademark Office. on: July 18, 2006.

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